

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,358	11/24/2003	Pengyue Li	LOT9-2003-0030-US1 - 15	4701
46321 7590 06/20/2007 CAREY, RODRIGUEZ, GREENBERG & PAUL, LLP STEVEN M. GREENBERG			EXAMINER	
			LU, KUEN S	
	950 PENINSULA CORPORATE CIRCLE SUITE 3020		. ART UNIT	PAPER NUMBER
BOCA RATON, FL 33487			2167	•
·			MAIL DATE	DELIVERY MODE
			06/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Art Unit: 2167

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

- **0.** A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Please note Applicant's Amendment filed March 5, 2007 has been entered.
- 1. This action is the Notice of Allowance Action of responsive to Applicant's Amendment filed March 5, 2007. It is acknowledged that claims 1, 7, 10 and 15 were amended and [[2-]] 3, 9, 14 and 17 were canceled.
- 2. After a thorough search and examination of the present application, and in light of the prior art made of record, Applicant's Amendment and Remarks filed March 5, 2007 and Examiner's amendments made May 3, 2007, Claims 1, 2, 5-8, 10-13 and 15-16 (renumbered to 1-12) are allowed.

Examiner's Amendments

3. Authorization for this Examiner's amendment, listed below, was given in telephone interview with Applicant, Mr. Steven M. Greenberg (Registration 44,725) on May 4, 2007 for amending claims 1, 7, 10 and 15. The summary of interview conducted on May 4, 2007 is attached.

Page 3

Application/Control Number: 10/720,358

Art Unit: 2167

3.1. Please amend Claims 1, 7, 10 and 15 as follow:

1. (Currently Amended) A <u>computer managed</u> meta-data driven resource management system <u>for limiting access to resource instances</u> comprising:

a resource non-specific database comprising a plurality of resource records corresponding to multiple different types of fixed or consumable collaborative resources.

wherein said fixed or consumable collaborative resources is used when in completing a task in a collaborative application;

a metadata manager programmed to perform the step of:

define <u>defining</u> records within said database according to resource name and resource attributes for different resource types specified within metadata definitions of said different resource types,

wherein each of said metadata definitions further specifying specifies a resource hierarchy;

a resource manager coupled to said metadata manager and said database, said resource manager comprising a configuration for performing steps comprising of:

creating, locating and reserving <u>said</u> resource instances based upon resource types stored in said database and defined within a corresponding metadata definition; and

an access control manager coupled to said resource manager and configured to limit perform the step of:

Art Unit: 2167

<u>limiting</u> access to individual ones of said resource instances based upon a specification of said resource containment hierarchy.

7. (Currently Amended) A metadata driven resource management method <u>for limiting</u>

<u>access to new resource instances</u> comprising the steps of:

identifying respective resource names and corresponding resource attributes for of a plurality of fixed or consumable collaborative resources in a plurality of individual metadata documents.

wherein said fixed or consumable collaborative resources is used when in completing a task in a collaborative application.

wherein said collaborative application is specified within said individual metadata documents, said metadata documents specifying and

wherein a resource containment hierarchy is specified in said metadata documents;

creating new resource instances,

processing individual metadata documents to

wherein said new resource instances to be is managed based upon said respective resource names and said corresponding resource attributes identified within said individual metadata documents;

persisting said new resource instances in a resource non-specific database;

locating and managing individual ones of said new resource instances based upon said individual metadata documents; and

Art Unit: 2167

limiting access to said new resource instances based upon said specification of said resource containment hierarchy.

10. (Currently Amended) A metadata driven resource management method comprising the step of:

adding a new manageable resource instance of a new manageable resource type for a fixed or consumable collaborative resource.

wherein said fixed or consumable collaborative resources is used when in completing a task in a collaborative application to a resource non-specific database.

wherein said resource non-specific database containing contains a set of manageable resource instances created from corresponding pre-existing manageable resource types which differ from the new resource type, and

wherein the adding step comprising the steps of:

defining the new manageable resource type in a markup language document with a specified resource name and at least one specified resource attribute, the markup language document specifying a resource containment hierarchy;

generating a user interface (UI) for creating and managing the new manageable resource instance based upon said at least one specified resource attribute in said markup language document;

writing the new manageable resource instance to the database; <u>and</u>

limiting access to the new manageable resource instance based upon an access control

Art Unit: 2167

list.

15. (Currently Amended) A machine readable storage <u>medium</u> having stored thereon a computer program for metadata driven resource management, the computer program comprising a routine set of instructions which when executed by the machine cause the machine to perform the steps of:

processing individual metadata documents to identify respective resource names and corresponding resource attributes for fixed or consumable collaborative used when completing a task in a collaborative application specified within said individual metadata documents, said metadata documents specifying a resource containment hierarchy; creating new resource instances to be managed based upon said respective resource names and said corresponding resource attributes identified within said individual metadata documents;

persisting said new resource instances in a resource non-specific database; and, locating and managing individual ones of said new resource instances based upon said individual metadata documents; and

limiting access to said new resource instances based upon said specification of said resource containment hierarchy.

identifying respective resource names and corresponding resource attributes of a plurality of fixed or consumable collaborative resources in a plurality of individual metadata documents, wherein said fixed or consumable collaborative resources is used in completing a task

in a collaborative application,

Art Unit: 2167

wherein said collaborative application is specified within said individual metadata documents, and

wherein a resource containment hierarchy is specified in said metadata documents; creating new resource instances,

wherein said new resource instances is managed based upon said respective resource names and said corresponding resource attributes identified within said individual metadata documents;

persisting said new resource instances in a resource non-specific database;

locating and managing individual ones of said new resource instances based upon said

individual metadata documents; and

limiting access to said new resource instances based upon said specification of said resource containment hierarchy.

Reasons For Allowance

4. The following is an examiner's statement of reasons for allowance:

In the Examiner's Office Action for Final Rejection of December 5, 2006, Examiner's Claim rejection under 35 U.S.C. §103(a) is primarily based on Bushe et al: "METHODS AND APPARATUS FOR DISPLAYING MANAGED RESOURCE INFORMATION", U.S. patent 6,978,422, issued December 20, 2005, hereafter "Bushe"; in view of Ruths et al: "DATA-CENTRIC COLLABORATIVE COMPUTING PLATFORM", U.S. patent Application 2003/0018719, published January 23, 2003, hereafter "Ruths"; and further in view of Dean et al: "ADAPTABLE RESOURCE MODEL", U.S. patent Application 2004/0098294, published May 20, 2004, hereafter "Dean".

Art Unit: 2167

After further consideration of Applicant's amendments made to the claims, Examiner is persuaded that the mostly recently amended claims 1, 7, 10 and 15, which include the below highlighted subject matter as described in each of independent claims 1, 7, 10 and 15, has overcome the teaching of the Bushe, Ruths and Dean references, and each of the claims describes an allowable subject matter.

identifying respective resource names and corresponding resource attributes of a plurality of fixed or consumable collaborative resources in a plurality of individual metadata documents,

wherein said fixed or consumable collaborative resources is used in completing a task in a collaborative application,

wherein said collaborative application is specified within said individual metadata documents, and

wherein a resource containment hierarchy is specified in said metadata documents;

creating new resource instances,

wherein said new resource instances is managed based upon said respective resource names and said corresponding resource attributes identified within said individual metadata documents;

persisting said new resource instances in a resource non-specific database;

Art Unit: 2167

locating and managing individual ones of said new resource instances based upon said individual metadata documents; and

limiting access to said new resource instances based upon said specification of said resource containment hierarchy.

An updated search for the prior arts on EAST database and on domains (NPL-ACM, Google, NPL-IEEE) has been conducted. The prior arts searched and investigated in the database and domains does not fairly teach or suggest the teaching of the newly amended claimed subject matter as combined and described in each of the independent claims 1, 7, 10 and 15.

The dependent claim(s) in the groups (4-6), (8), (11-13) and (16), depending directly or indirectly upon claims 1, 7, 10 and 15, respectively, are also distinct from the prior art for the same reason.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuen S. Lu whose telephone number is (571) 272-

Art Unit: 2167

4114. The examiner can normally be reached on Monday-Friday (8:00 am-5:00 pm). If attempts to reach the examiner by telephone pre unsuccessful, the examiner's Supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is 703-305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for Page 13 published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 703-305-3900 (toll free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, please call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kuen S. Lu, Ju Lu

Patent Examiner, Art Unit 2167

July 14, 2007

Art Unit: 2167

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

0. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Please note Applicant's Amendment filed March 5, 2007 has been entered.

- 1. This action is the Notice of Allowance Action of responsive to Applicant's Amendment filed March 5, 2007. It is acknowledged that claims 1, 7, 10 and 15 were amended and [[2-]] 3, 9, 14 and 17 were canceled.
- 2. After a thorough search and examination of the present application, and in light of the prior art made of record, Applicant's Amendment and Remarks filed March 5, 2007 and Examiner's amendments made May 3, 2007, Claims 1, 2, 5-8, 10-13 and 15-16 (renumbered to 1-12) are allowed.

Examiner's Amendments

3. Authorization for this Examiner's amendment, listed below, was given in telephone interview with Applicant, Mr. Steven M. Greenberg (Registration 44,725) on May 4, 2007 for amending claims 1, 7, 10 and 15. The summary of interview conducted on May 4, 2007 is attached.

Art Unit: 2167

3.1. Please amend Claims 1, 7, 10 and 15 as follow:

1. (Currently Amended) A <u>computer managed</u> meta-data driven resource management system for limiting access to resource instances comprising:

a resource non-specific database comprising a plurality of resource records corresponding to multiple different types of fixed or consumable collaborative resources.

wherein said fixed or consumable collaborative resources is used when in completing a task in a collaborative application;

a metadata manager programmed to perform the step of:

define <u>defining</u> records within said database according to resource name and resource attributes for different resource types specified within metadata definitions of said different resource types,

wherein each of said metadata definitions further specifying specifies a resource hierarchy;

a resource manager coupled to said metadata manager and said database, said resource manager comprising a configuration for performing steps comprising of:

creating, locating and reserving <u>said</u> resource instances based upon resource types stored in said database and defined within a corresponding metadata definition; and

an access control manager coupled to said resource manager and configured to limit perform the step of:

Art Unit: 2167

limiting access to individual ones of said resource instances based upon a specification of said resource containment hierarchy.

7. (Currently Amended) A metadata driven resource management method <u>for limiting</u> <u>access to new resource instances</u> comprising the steps of:

identifying respective resource names and corresponding resource attributes for of a plurality of fixed or consumable collaborative resources in a plurality of individual metadata documents.

wherein said fixed or consumable collaborative resources is used when in completing a task in a collaborative application,

wherein said collaborative application is specified within said individual metadata documents, said metadata documents specifying and

wherein a resource containment hierarchy is specified in said metadata documents;

creating new resource instances,

processing individual metadata-documents to

wherein said new resource instances to be is managed based upon said respective resource names and said corresponding resource attributes identified within said individual metadata documents;

persisting said new resource instances in a resource non-specific database;

locating and managing individual ones of said new resource instances based upon said individual metadata documents; and

limiting access to said new resource instances based upon said specification of said resource containment hierarchy.

10. (Currently Amended) A metadata driven resource management method comprising the step of:

adding a new manageable resource instance of a new manageable resource type for a fixed or consumable collaborative resource,

wherein said fixed or consumable collaborative resources is used when in completing a task in a collaborative application to a resource non-specific database.

wherein said resource non-specific database containing contains a set of manageable resource instances created from corresponding pre-existing manageable resource types which differ from the new resource type, and

wherein the adding step comprising the steps of:

defining the new manageable resource type in a markup language document with a specified resource name and at least one specified resource attribute, the markup language document specifying a resource containment hierarchy;

generating a user interface (UI) for creating and managing the new manageable resource instance based upon said at least one specified resource attribute in said markup language document;

writing the new manageable resource instance to the database; <u>and</u>
limiting access to the new manageable resource instance based upon an access control

Art Unit: 2167

list.

15. (Currently Amended) A machine readable storage <u>medium</u> having stored thereon a computer program for metadata driven resource management, the computer program comprising a routine set of instructions which when executed by the machine cause the machine to perform the steps of:

processing individual metadata documents to identify respective resource names and corresponding resource attributes for fixed or consumable collaborative used when completing a task in a collaborative application specified within said individual metadata documents, said metadata documents specifying a resource containment hierarchy; creating new resource instances to be managed based upon said respective resource names and said corresponding resource attributes identified within said individual metadata documents;

persisting said new resource instances in a resource non-specific database; and, locating and managing individual ones of said new resource instances based upon said individual metadata documents; and

limiting access to said new resource instances based upon said specification of said resource containment hierarchy.

identifying respective resource names and corresponding resource attributes of a plurality of fixed or consumable collaborative resources in a plurality of individual metadata documents,

wherein said fixed or consumable collaborative resources is used in completing a task in a collaborative application,

wherein said collaborative application is specified within said individual metadata documents, and

wherein a resource containment hierarchy is specified in said metadata documents; creating new resource instances,

wherein said new resource instances is managed based upon said respective resource

names and said corresponding resource attributes identified within said individual metadata

documents;

persisting said new resource instances in a resource non-specific database;

locating and managing individual ones of said new resource instances based upon said individual metadata documents; and

limiting access to said new resource instances based upon said specification of said resource containment hierarchy.

Reasons For Allowance

4. The following is an examiner's statement of reasons for allowance:

In the Examiner's Office Action for Final Rejection of December 5, 2006, Examiner's Claim rejection under 35 U.S.C. §103(a) is primarily based on Bushe et al: "METHODS AND APPARATUS FOR DISPLAYING MANAGED RESOURCE INFORMATION", U.S. patent 6,978,422, issued December 20, 2005, hereafter "Bushe"; in view of Ruths et al: "DATA-CENTRIC COLLABORATIVE COMPUTING PLATFORM", U.S. patent Application 2003/0018719, published January 23, 2003, hereafter "Ruths"; and further in view of Dean et al: "ADAPTABLE RESOURCE MODEL", U.S. patent Application 2004/0098294, published May 20, 2004, hereafter "Dean".

After further consideration of Applicant's amendments made to the claims, Examiner is persuaded that the mostly recently amended claims 1, 7, 10 and 15, which include the below highlighted subject matter as described in each of independent claims 1, 7, 10 and 15, has overcome the teaching of the Bushe, Ruths and Dean references, and each of the claims describes an allowable subject matter.

identifying respective resource names and corresponding resource attributes of a plurality of fixed or consumable collaborative resources in a plurality of individual metadata documents,

wherein said fixed or consumable collaborative resources is used in completing a task in a collaborative application,

wherein said collaborative application is specified within said individual metadata documents, and

wherein a resource containment hierarchy is specified in said metadata documents;

creating new resource instances,

wherein said new resource instances is managed based upon said respective resource names and said corresponding resource attributes identified within said individual metadata documents;

persisting said new resource instances in a resource non-specific database;

Art Unit: 2167

locating and managing individual ones of said new resource instances based upon said individual metadata documents; and

limiting access to said new resource instances based upon said specification of said resource containment hierarchy.

An updated search for the prior arts on EAST database and on domains (NPL-ACM, Google, NPL-IEEE) has been conducted. The prior arts searched and investigated in the database and domains does not fairly teach or suggest the teaching of the newly amended claimed subject matter as combined and described in each of the independent claims 1, 7, 10 and 15.

The dependent claim(s) in the groups (4-6), (8), (11-13) and (16), depending directly or indirectly upon claims 1, 7, 10 and 15, respectively, are also distinct from the prior art for the same reason.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuen S. Lu whose telephone number is (571) 272-

Art Unit: 2167

4114. The examiner can normally be reached on Monday-Friday (8:00 am-5:00 pm). If attempts to reach the examiner by telephone pre unsuccessful, the examiner's Supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is 703-305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for Page 13 published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 703-305-3900 (toll free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, please call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kuen S. Lu, lightu

Patent Examiner, Art Unit 2167

July 14, 2007